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Long Beach breakwater can't be entirely removed, report says

By Joe Segura, Staff Writer

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LONG BEACH - An engineering study released Thursday has concluded that complete removal of the breakwater is not a feasible option.

The Moffatt & Nichol engineering study - scheduled for review in a special City Council study session Monday at 5 p.m. - concludes "there are too many negative impacts that cannot be effectively mitigated in a cost-effective manner."

However, the study's executive summary contends alternatives "could both restore the ecosystem and create recreational value."

Among the key findings, according to the study's executive summary:

Long Beach could gain up to $52 million per year in local economic activity, and up to $6.7 million per year in taxes and parking fees and fines.

Redirecting the mouth of the Los Angeles River could improve shoreline water quality without changes to the breakwater.

Some reconfigurations would require mitigation, since there would be a potential for "significant wave energy" increases to port infrastructure, THUMS oil islands, Navy anchorages in Seal Beach and beaches.

The five alternatives range in construction costs from about $10 million to $310 million.

The reconfiguration alternatives being considered include:

Removing rocks from the top of the 1,800-foot-long section at the western end of the structure, leaving the rest untouched.

Removing a section down to a depth well below the water surface to provide sufficient wave transmission - for example, down to 30 feet below mean sea level - to "modify the circulation leeward of the breakwater."

Reconfiguring the breakwater to staggered sections, but relocating sections to create gaps for wave action on the shoreline. Based on initial assessment, a potential configuration would be removal of a 9,000-foot-long section at the eastern end, using the removed rock to construct two new more-shoreward-located breakwaters to protect oil islands and shoreline. "This alternative would most likely require re-

location of the Navy explosives anchorage," the study adds.

Realigning the ends of the breakwater by removing an end section of the structure. A new section perpendicular to the existing breakwater would be constructed at that end. "This would allow for some wave action upon the shoreline, but would provide a similar level of protection to the Navy explosives anchorage leeward of the breakwater," the study asserts.

Moffatt & Nichol engineers said alternatives can create up to 500 acres of kelp bed and up to 300 acres of rocky reef habitat from removed breakwater sections.

A copy of the report will be available for review at: www.longbeach.gov/citymanager/ga/breakwater .

The breakwater protects the city's coast. It was built in the 1940s to protect Navy ships in the ports of Long Beach and Los Angeles.

Environmentalists have long been concerned about the degraded quality of offshore water, spoiled in great part by the pollution dumped into the area by the Los Angeles River. And they pushed for a study to improve wave activity.

Councilman Patrick O'Donnell, a leading proponent for reconfiguration of the breakwater, said a change of the structure should improve coastal waters.

"On any 85-degree day, our beaches are empty," he said.

Robert Palmer, veteran member of the Long Beach Surfrider Foundation chapter, said he didn't find any surprises in the study.

"It's about what I expected - nothing less, nothing more," he said.

That preliminary Moffatt & Nichol engineering study was under the direction of Russell H. Boudreau, principal coastal engineer for the firm.

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